

AMENDMENTS TO THE CLAIMS

1 through 36 (Cancelled)

37. (Currently Amended) A method of testing a plurality of ~~die~~ dies fabricated on a wafer, said method comprising:

connecting a first terminal of each of said plurality of ~~die~~ dies to a common signal conductor through respective temporary isolation devices which allow said ~~die~~ dies to receive a signal from said common signal conductor during a first test procedure; and

connecting said first terminal of at least some of said plurality of ~~die~~ dies to another conductor during a second test procedure, said temporary isolation devices being activated during said second test procedure to isolate said first terminal of said at least some of said ~~die~~ dies from said common signal conductor during said second test procedure.

38. (Currently Amended) A method of testing a semiconductor die on a wafer comprising:

(1) applying voltage to a first voltage line which connects with a plurality of ~~die~~ dies on said wafer through respective temporary isolation devices;

(2) removing voltage from said first voltage line; and

(3) applying voltage to a die by connecting a probe to a first voltage terminal associated with said die, said die being isolated from said first voltage line by a respective temporary isolation device.

39. (Original) A method of claim 38 wherein steps (1) and (2) are performed before step (3).

40. (Original) A method of claim 37 further comprising permanently isolating a die from said common first voltage conductor as a result of tests performed in said first or second test procedures.

41. (Original) A method of claim 38 wherein step (1) is performed after steps (2) and (3).

42. (New) A method as in claim 37, further comprising permanently isolating one or more of said plurality of dies found defective during at least said first or second test procedure from said common conductor.

43. (New) A method as in claim 42, wherein said permanently isolating one or more of said plurality of dies comprises activating a permanent isolation device coupled between said common conductor and one or more of said plurality of dies found defective during said first or second test procedure.

44. (New) A method as in claim 43, wherein said permanent isolation device comprises a laser activated fuse.

45. (New) A method of testing a semiconductor wafer comprising:

supplying a first signal to a first signal line on a semiconductor wafer coupled to a plurality of dies fabricated on said wafer during a first test mode, each die comprising an

integrated circuit and a first terminal used to apply said first signal to internal components of said die;

determining one or more dies to temporarily isolate from said plurality of dies;

supplying a second signal to a unidirectional circuit device on said one or more dies to temporarily isolate from said plurality of dies during a second test mode; and

temporarily isolating said one or more dies from said plurality of dies when said second signal is supplied to said unidirectional circuit device;

wherein, each unidirectional circuit device is coupled between said first signal line and said first terminal of a respective die for allowing said first signal to move in only one direction between said first signal line and the first terminal of a respective die.

46. (New) A method as in claim 45, wherein said supplying a second signal to said one or more dies to temporarily isolate said one or more dies from said plurality of dies comprises supplying said second signal to one of a plurality of first and second conductive surfaces, one of said plurality of first conductive surfaces being coupled between an input of each said plurality of unidirectional circuit devices and said first signal line, one of said plurality of second conductive surfaces being coupled between an input each said plurality of unidirectional circuits devices and said first terminal of a respective die.

47. (New) A method as in claim 45, wherein said temporarily isolating said one or more dies from said plurality of dies comprises selectively decoupling one of said

plurality of dies that said unidirectional circuit device is coupled from said first signal line when at least said second signal is applied to a conductive probe pad coupled between said unidirectional circuit device and said first terminal.

48. (New) A method as in claim 45, further comprising selectively supplying a third signal to a second terminal coupled between said unidirectional circuit device and said first signal line, said supplying a second signal to a unidirectional circuit device on said one or more dies to temporarily isolate from said plurality of dies comprises supplying said second signal to a third terminal coupled between said unidirectional circuit device and said first terminal, said second and third terminals receiving a respective second and third signal in a first test mode.

49. (New) A method as in claim 48, wherein unidirectional circuit device comprises a diode, said first test mode reverse biases said diode to electrically decouple said first signal conductor with said circuitry for performing an electrical function on one of said dies.

50. (New) A method as in claim 45, further comprising permanently isolating one or more of said plurality of dies found defective during said first or second test modes from said first signal line.

51. (New) A method as in claim 50, wherein said permanently isolating one or more of said plurality of dies comprises activating a permanent isolation device coupled

between said first signal line and one or more of said plurality of dies found defective during said first or second test modes.

52. (New) A method as in claim 50, wherein said permanent isolation device comprises a laser activated fuse.